



The LPC and You

Sarah Eno

Thanks to Kaori Maeshima

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The LPC: our mission

An attempt to reproduce the benefits of being at the lab in our time zone, on our side of the Atlantic.

- a **critical mass** (clustering) of young people who are actively working on software (reconstruction, particle identification, physics analysis) in a **single** location (11th floor of the high rise)
- one stop shopping for your analysis questions
- analysis tools such as large meeting rooms, video conferencing, large scale computing, “water cooler”
- virtual control room for active participation in the running and quality control of the experiment

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Support within CMS

I did a survey of all US CMS Universities.

Will your university have somebody stationed permanently at the lab, working on software on the 11th floor, in the years

Year	probably	hopefully	%
2004	11	1	30
2005	11	11	55%
2006	9	18	68%



Finding a Seat at the LPC

Move in date
end of October



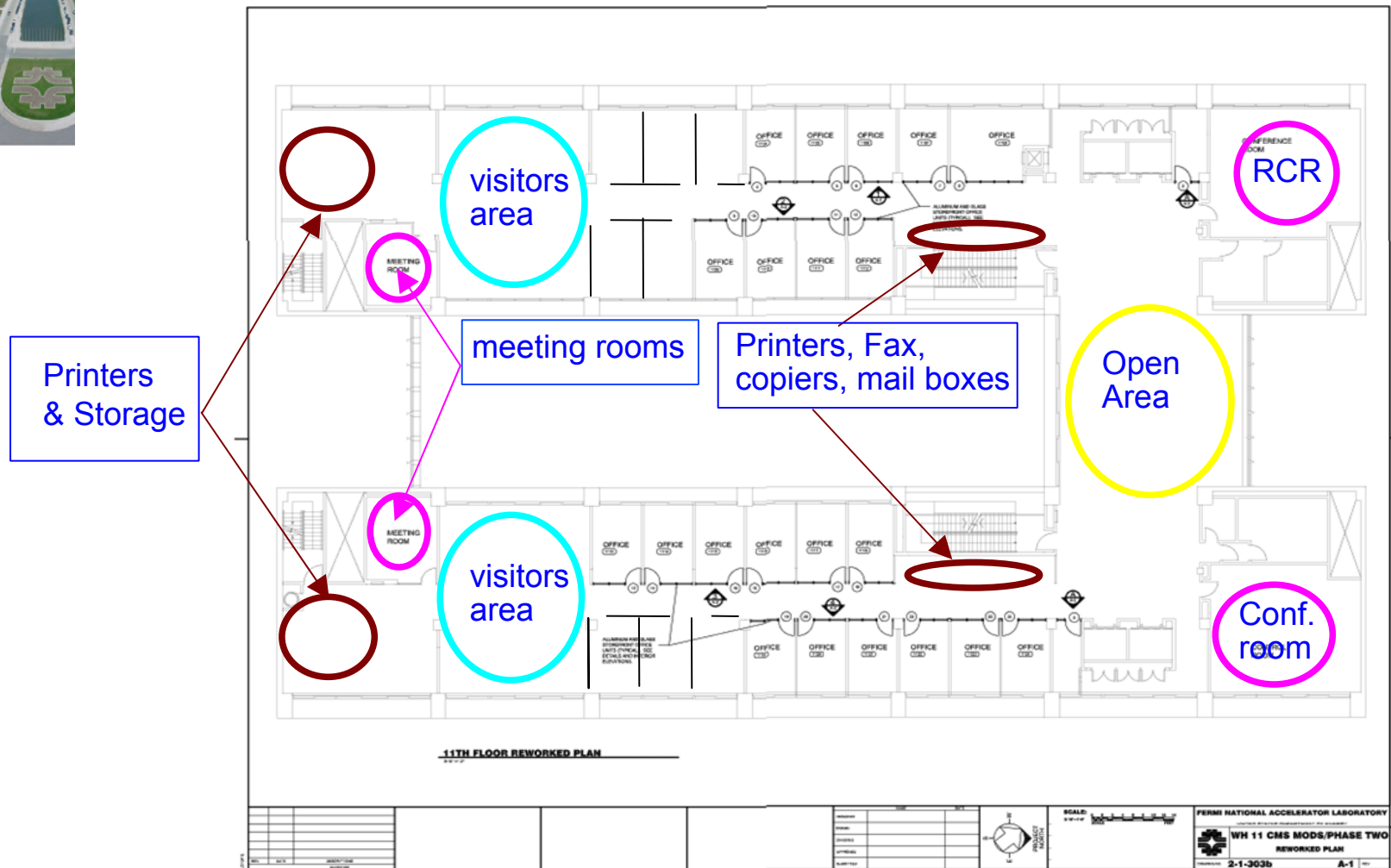
- high speed internet access
- transient area on cross over
- lockers for transients
- 1 large and 2 small meeting rooms
- secretary support, printers, etc
- Italian espresso machine
- remote control room
- offices for permanent workers

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View to the North

11th Floor General Plan

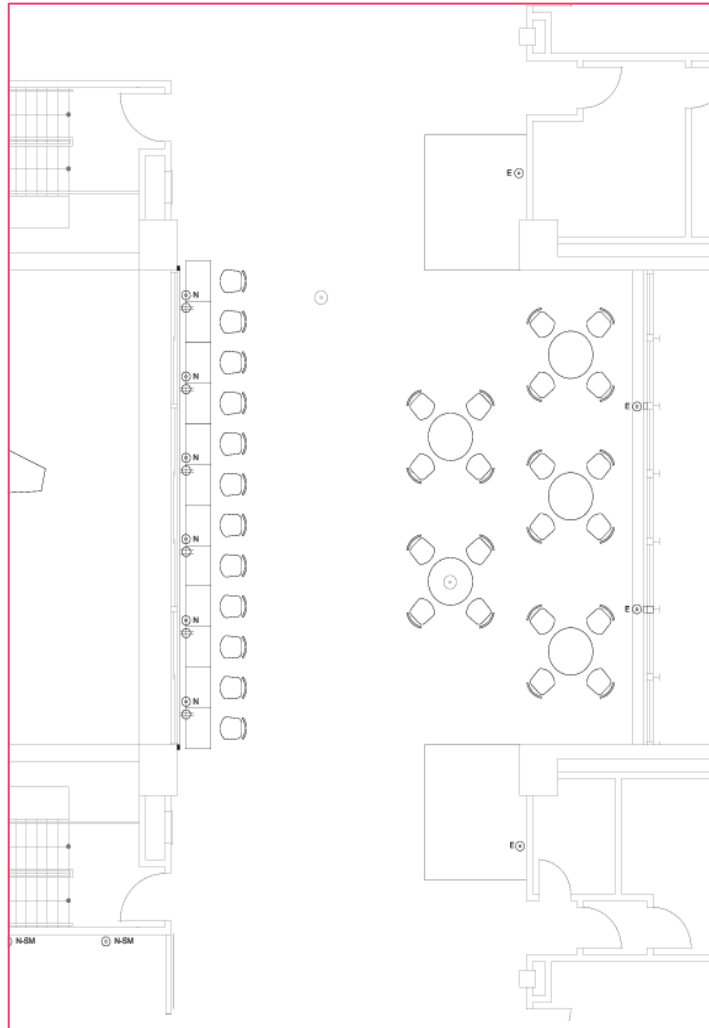


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View
to
the

11th Floor X-Over: Open Area



note: This x-over arrangement is a plan.
---> still waiting for an approval from the director's office.

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View
to
the
Future

11th Floor X-Over: furniture examples

tables to sit around,
but also they are
DISPLAY for our experiment



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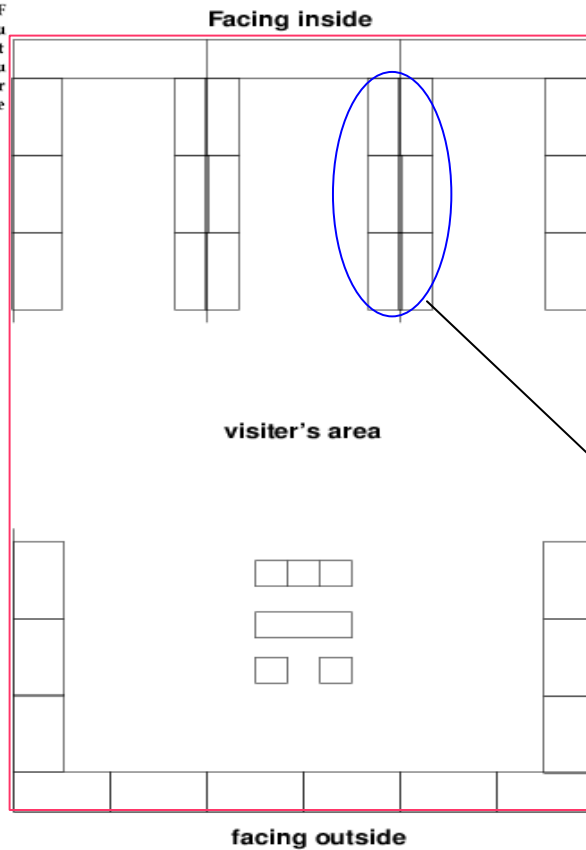


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View
to
the
Future

11th Floor: Visitor's Area



permanent desks were not assigned.
Lockers for visitors.

e-mail center WH ground floor





View
to
the
Future

LPC Web Page

<http://www.uscms.org/LPC/LPC.htm>

The LHC Physics Center at FNAL



View
to
the
Future

The LHC Physics Center (LPC) at FNAL was established in April 2004 by Mike Witherell and Dan Green for the following purposes:

- a "brick and mortar" location for CMS physicists to find experts on all aspects of data analysis, particle ID, software, and event processing within the US, working during hours convenient for U.S.-based physicists
- a center of physics excellence within the US for LHC physics
- a place for workshops/conferences/gatherings on LHC physics
- a place for the training of graduate and postgraduate scientists from URA Universities.
- a "remote control room" that CMS physicists can use to participate in data taking and quality control for the CMS experiment in the U.S.
- a tool to help provide a graceful transition between the Tevatron and LHC experiments for those physicists participating in both, maximizing the manpower available to each during the transition time.

The center is run by [Avi Yagil](#) (FNAL) and [Sarah Eno](#) (UMD) and is located on the 11th floor of the FNAL hi-rise. The level-2 manager is [Kaori Maeshima](#). The members of our advisory board can be found [at this link](#). Our milestones can be found [at this link](#). The LPC makes use of the promoximity of the [FNAL "Tier-1" computing center](#) and the Tevatron experiments. To learn more about our center, choose one of the following options.

[Working Groups](#)

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LPC & You

There are many different modes to use this center

- your postdoc who is stationed at FNAL work on both CMS and a Tevatron experiment can have a desk on the 11th floor and be near people from both accelerators
- station a CMS postdoc at FNAL permanently for the same kind of advantages you get in the D0/CDF trailers
- send a postdoc stationed at your university for a month, to get up to speed on analysis basics and to form personal connections that will help his/her later work
- send students for the summer to give them a richer experience by having them interact with more people
- come every other week to help you feel connected to the experiment (who knows! The US is the biggest country on CMS. We'll get the data in real time. Maybe the center-of-mass of analysis for CMS will somewhere in the middle of the Atlantic.
- come for a day for help with a particularly knotty software or analysis problem

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Plan

- Summer 2004: build a core group at FNAL who know the code and can help others get started
- Oct 22: presentation for advisory board to show have accomplished this
- Next stage: in cooperation with International CMS, pick out projects with aim of contributing to volume I of the physics TDR

Volume 1: particle ID, calibrations, commissioning, analysis using full simulation of a few key channels

Volume 2: fast Monte Carlo studies of physics research

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LPC Org Chart/Working Groups

Address http://www.uscms.org/LPC/working_groups.htm Go

Search Web 275 blocked AutoFill Options

LPC Working Groups

One of the main goals of the LPC is to have a place in the U.S. where CMS Physicists can find experts in all areas of CMS software and reconstruction. Our current working groups and their conveners are:

[Agenda Server for LPC Meetings](#)

[LPC Offline Coordinators](#): Liz Sexton-Kennedy and Hans Wenzel

[Tracking](#): Kevin Burkett and Sasha Khanov

[Electron/Photon](#): Yuri Gershtein and Heidi Schellman

[Muon](#): Eric James and Martijn Mulders

[Jet/Met](#): Rob Harris and Marek Zielinski

[Trigger](#): Sridhara Dasu and Stephan Lammel

[Simulation](#): Daniel Elvira and Boaz Klima

Please click on the link to get to each group's web page.

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Jet/Met

Heads: Rob Harris (FNAL) and Marek Zielinski

At FNAL: Lalith Perera (Rutgers)

Away: Maria Spiropulu (CERN), Alexi Mestvirishvili (Iowa)



Tracking

Heads: Kevin Burkett (FNAL), Sasha Khanov (FNAL)

At FNAL:

Away: Ken Bloom (Nebraska),



Simulation

Heads: Boaz Klima (FNAL), Daniel Elvira (FNAL)

At FNAL: Avto Kharchilava (Notre Dame), Michael Schmitt (Northwestern)

Away: Megan Lehnherr and Chadd Smith (UIC),
xxx (Kansas)



Muon

Group Heads: Eric James (FNAL), Martijn Mulders (FNAL)

At FNAL: Nikolai Terentiev (Carnegie Mellon)

Away: Darien Wood (Northeastern), Ela Barberis (Northeastern)



e/γ

Group Heads: Heidi Schellman (Northwestern), Yuri Gershstein (Florida)

Away: Roger Russack (Minnesota)



Trigger

Heads: Sridhara Dasu (Wisconsin), Stefan Lammel (FNAL)

At FNAL: Mayda xxx (Northwestern)

Away: Darin Acosta (Florida)



EDM/Tools

Group heads: Lix Sexton-Kennedy (FNAL), Hans Wenzel (FNAL)



Conclusions

Join us!!!

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